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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,666	08/04/2003	Chen-Ze Hu	250321-1010	5304
24504	7590	05/27/2005	EXAMINER	
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 ATLANTA, GA 30339-5948			GUHARAY, KARABI	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/633,666

Applicant(s)

HU ET AL.

Examiner

Karabi Guharay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The listing of references in the specification (see page 2, line 10, US 585594) is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Specification, page 4, in the part list # 100 a organic layer is not shown in the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and

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informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1-5 are objected to because of the following informalities:

The claims 1-5 are objected to because claims 1 & 3 include essential subject matter, in this case ($e \leq 2$, $2-e = a+b+e+d+f$) enclosed within parentheses. While reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses, so as to avoid confusion with other numbers or characters which may appear in the claims, essential subject matter should not be enclosed within parentheses since references enclosed within parentheses do not constitute a limitation. See MPEP § 608.01(m).

Appropriate corrections are required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3 & 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Harvey, III et al. (US 5757126).

Regarding claims 1 & 3, Harvey discloses a plastic substrate and the method of fabricating the plastic substrate for organic EL devices (11 of Fig 1-11, lines 7-12 of

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column 4) comprising the step of providing a plastic substrate (11) and a depositing film (18, lines 56-61 of column 4) with a predetermined thickness formed on the plastic substrate (11) by plasma chemical vapor deposition, the film having a formula $\text{SiO}_e\text{C}_a\text{H}_b\text{X}_c\text{Y}_d\text{Z}_f$, in this case SiO_2 (where $e = 2$, and $a + b + c + d + f = 0$, thus a, b, c, d, f are 0). See lines 5-13 of column 5.

Regarding claim 5, Harvey discloses an organic EL device 12 (see Figs 1) comprising a cathode 15, an anode 13, at least an organic layer 14 between the anode and the cathode (lines 14-21 of column 4) such that when a voltage is applied to the cathode and anode the organic layer electroluminesces (which is the principle of operation of OLED), a plastic substrate beneath the cathode (layer 24 made of plastic, lines 28-44 of column 5) and a second plastic substrate 11 as claimed in claim 1 (see rejection of claim 1) above the anode 13.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Graff et al. (US 6570325).

Regarding claims 1 & 3, Graff et al. disclose a plastic substrate and the method of fabricating the plastic substrate for organic EL devices (205 of Fig 2, lines 510 of column 6) comprising the step of providing a plastic substrate (205) and a depositing film (barrier layer 255, lines 34-36 of column 5) with a predetermined thickness formed on the plastic substrate (205) by plasma chemical vapor deposition (lines 55-61 of column 6), the film having a formula $\text{SiO}_e\text{C}_a\text{H}_b\text{X}_c\text{Y}_d\text{Z}_f$, (silicon oxide SiO_2 , line 33 of column 6), where $e = 2$, and $a + b + c + d + f = 0$, thus a, b, c, d, f are 0.

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Regarding claims 2 & 4, Graff et al. disclose that the thickness of the barrier layer is between 0.1- 4.5 micron (lines 3-9 of column 7).

Regarding claim 5, Graff et al. disclose an OLED (215), which inherently contain an anode and a cathode and at least one one organic layer between cathode and anode such that when a voltage is applied to the cathode and anode the organic layer electroluminescens and further comprises a second plastic substrate 205 above anode as claimed in claim 1 and a first plastic substrate beneath cathode (second barrier stack (115, lines 56-62 of column 4).

Other Prior Art Cited

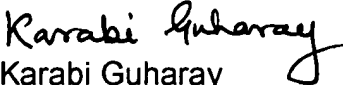
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure : Graff et al. (US 6573652); Suzuki et al. (US 6198217).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karabi Guharay whose telephone number is (571) 272-2452. The examiner can normally be reached on Monday-Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Karabi Guharay
Patent Examiner
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